

FORM PTO - 1449

## INFORMATION DISCLOSURE STATEMENT



ATTY DOCKET NO.: ASC-023C2

APPLICANTS: Fitzgerald

SERIAL NO.: 10/826,156

FILING DATE: April 16, 2004

GROUP: 2826

## U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MLT	A1	2002/0100942	08/01/2001	Fitzgerald et al.			06/19/2001
	A2	2002/0084000	07/04/2002	Fitzgerald			12/17/2001
	A3	2002/0096717	07/25/2002	Chu et al.			01/25/2001
	A4	2002/0123197	09/05/2002	Fitzgerald et al.			06/19/2001
	A5	2002/0123183	09/05/2002	Fitzgerald			07/16/2001
	A6	2002/0123167	09/05/2002	Fitzgerald			07/16/2001
	A7	2002/0125497	09/12/2002	Fitzgerald			07/16/2001
	A8	2002/0125471	09/12/2002	Fitzgerald et al.			12/04/2001
	A9	2002/0168864	11/14/2002	Cheng et al.			
	A10	2003/0013323	01/16/2003	Hammond et al.			
	A11	2003/0025131	02/06/2003	Lee et al.			
	A12	2003/0034529	02/20/2003	Fitzgerald et al.			
	A13	2003/0057439	03/17/2003	Fitzgerald			
	A14	2003/0077867	04/24/2003	Fitzgerald			
	A15	2003/0102498	06/05/2003	Braithwaite et al.			
	A16	2003/0227057	12/11/2003	Lochtefeld et al.			10/04/2002
	A17	2004/0005740	01/08/2004	Lochtefeld et al.			06/06/2003
	A18	2004/0031979	02/19/2004	Lochtefeld et al.			06/06/2003
	A19	2004/0075149	04/22/2004	Fitzgerald et al.			07/23/2003
	A20	2004/0219726	11/04/2004	Fitzgerald			05/26/2004
	A21	2004/0262631	12/13/2004	Fitzgerald			04/16/2004
	A22	2005/0009288	01/13/2005	Cheng et al.			03/17/2004
	A23	2005/0156246	07/21/2005	Langdo et al.			03/07/2005
	A24	4,010,045	03/01/1977	Ruehrwein			
	A25	4,710,788	12/01/1987	Dambkes et al.			
	A26	4,900,372	12/13/1990	Lee et al.			
	A27	4,987,462	01/22/1991	Kim et al.			
	A28	4,990,979	02/05/1991	Otto			
	A29	4,997,776	03/05/1991	Haramé et al.			
	A30	5,013,681	05/07/1991	Godbey et al.			
MLT	A31	5,091,767	02/25/1992	Bean et al.			

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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INIT.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
MLT	A32	5,097,630	03/24/1992	Maeda <i>et al.</i>			
	A33	5,155,571	10/13/1992	Wang <i>et al.</i>			
	A34	5,159,413	10/27/1992	Calviello <i>et al.</i>			
	A35	5,166,084	11/24/1992	Pfiester			
	A36	5,177,583	01/05/1993	Endo <i>et al.</i>			
	A37	5,202,284	04/01/1993	Kamins <i>et al.</i>			
	A38	5,207,864	05/04/1993	Bhat <i>et al.</i>			
	A39	5,208,182	05/04/1993	Narayan <i>et al.</i>			
	A40	5,210,052	05/11/1993	Takasaki			
	A41	5,212,110	05/18/1993	Pfiester <i>et al.</i>			
	A42	5,221,413	06/22/1993	Brasen <i>et al.</i>			
	A43	5,241,197	08/31/1993	Murakami <i>et al.</i>			
	A44	5,250,445	10/05/1993	Bean <i>et al.</i>			
	A45	5,252,173	10/12/1993	Inoue			
	A46	5,279,687	01/18/1994	Tuppen <i>et al.</i>			
	A47	5,285,086	02/08/1994	Fitzgerald, Jr.			
	A48	5,291,439	03/01/1994	Kauffmann, <i>et al.</i>			
	A49	5,298,452	03/29/1994	Meyerson			
	A50	5,308,444	05/03/1994	Fitzgerald <i>et al.</i>			
	A51	5,310,451	05/10/1994	Tejwani <i>et al.</i>			
	A52	5,316,958	05/31/1994	Meyerson			
	A53	5,346,848	09/13/1994	Gruppen-Shemansky <i>et al.</i>			
	A54	5,374,564	12/20/1994	Bruel			
	A55	5,413,679	05/09/1995	Godbey			
	A56	5,424,243	06/13/1995	Takasaki			
	A57	5,425,846	06/20/1995	Koze <i>et al.</i>			
	A58	5,426,069	06/20/1995	Selvakumar <i>et al.</i>			
	A59	5,426,316	06/20/1995	Mohammad			
	A60	5,461,243	10/24/1995	Ek <i>et al.</i>			
	A61	5,461,250	10/24/1995	Burghartz <i>et al.</i>			
	MLT	A62	5,462,883	10/31/1995	Dennard <i>et al.</i>		
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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INIT.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
MLT	A63	5,476,813	12/19/1995	Naruse			
	A64	5,479,033	12/26/1995	Baca et al.			
	A65	5,484,664	01/16/1996	Kitahara et al.			
	A66	5,523,243	06/04/1996	Mohammad			
	A67	5,523,592	06/04/1996	Nakagawa et al.			
	A68	5,534,713	07/09/1996	Ismail et al.			
	A69	5,536,361	07/16/1996	Kondo et al.			
	A70	5,540,785	07/30/1996	Dennard et al.			
	A71	5,596,527	01/12/1997	Tomioka, et al.			
	A72	5,617,351	04/01/1997	Bertin, et al.			
	A73	5,630,905	05/20/1997	Lynch et al.			
	A74	5,633,516	05/27/1997	Mishima et al.			
	A75	5,659,187	08/19/1997	Legoues et al.			
	A76	5,683,934	11/04/1997	Candelaria			
	A77	5,698,869	12/16/1997	Yoshimi et al.			
	A78	5,714,777	02/03/1998	Ismail et al.			
	A79	5,728,623	03/17/1998	Mori			
	A80	5,739,567	04/14/1998	Wong			
	A81	5,759,898	06/02/1998	Ek et al.			
	A82	5,777,347	07/07/1998	Bartelink			
	A83	5,786,612	07/28/1998	Otani et al.			
	A84	5,786,614	07/28/1998	Chuang, et al.			
	A85	5,792,679	08/11/1998	Nakato			
	A86	5,801,085	09/01/1998	Kim et al.			
	A87	5,808,344	09/15/1998	Ismail et al.			
	A88	5,810,924	09/22/1998	Legoues et al.			
	A89	5,828,114	10/27/1998	Kim et al.			
	A90	5,847,419	12/08/1998	Imai et al.			
	A91	5,859,864	01/12/1999	Jewell			
	A92	5,877,070	03/02/1999	Goesele et al.			
MLT	A93	5,891,769	04/06/1999	Liaw et al.			
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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MLT	A94	5,906,708	05/25/1999	Robinson et al.			
	A95	5,906,951	05/25/1999	Chu et al.			
	A96	5,912,479	06/15/1999	Mori et al.			
	A97	5,943,560	08/24/1999	Chang et al.			
	A98	5,963,817	10/05/1999	Chu et al.			
	A99	5,966,622	10/12/1999	Levine et al.			
	A100	5,998,807	12/07/1999	Lustig et al.			
	A101	6,010,937	01/04/2000	Karam et al.			
	A102	6,013,134	01/11/2000	Chu et al.			
	A103	6,030,884	02/29/2000	Mori			
	A104	6,033,974	03/07/2000	Henley et al.			
	A105	6,033,995	03/07/2000	Muller			
	A106	6,039,803	03/21/2000	Fitzgerald et al.			
	A107	6,058,044	05/02/2000	Sugiura et al.			
	A108	6,059,895	05/09/2000	Chu et al.			
	A109	6,074,919	06/13/2000	Gardner et al.			
	A110	6,096,590	08/01/2000	Chan et al.			
	A111	6,103,559	08/15/2000	Gardner et al.			
	A112	6,107,653	08/22/2000	Fitzgerald			
	A113	6,111,267	08/29/2000	Fischer et al.			
	A114	6,117,750	09/12/2000	Bensahel et al.			
	A115	6,124,614	09/26/2000	Ryum et al.			
	A116	6,130,453	10/10/2000	Mei, et al.			
	A117	6,133,799	10/17/2000	Favors, Jr., et al.			
	A118	6,140,687	10/31/2000	Shimomura et al.			
	A119	6,143,636	11/07/2000	Forbes, et al.			
	A120	6,153,495	11/28/2000	Kub et al.			
	A121	6,154,475	11/28/2000	Soref et al.			
	A122	6,160,303	12/12/2000	Fattaruso			
	A123	6,162,688	12/19/2000	Gardner et al.			
MLT	A124	6,184,111	02/06/2001	Henley et al.			
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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INIT.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE	
MLT	A125	6,191,006	02/20/2001	Mori			
	A126	6,191,007	02/20/2001	Matsui et al.			
	A127	6,191,432	02/20/2001	Sugiyama et al.			
	A128	6,194,722	02/27/2001	Fiorini et al.			
	A129	6,204,529	03/20/2001	Lung, et al.			
	A130	6,207,977	03/01/2001	Augusto			
	A131	6,210,988	04/03/2001	Howe et al.			
	A132	6,218,677	04/17/2001	Broekaert			
	A133	6,232,138	05/15/2001	Fitzgerald et al.			
	A134	6,235,567	05/22/2001	Huang			
	A135	6,242,324	06/05/2001	Kub et al.			
	A136	6,249,022	06/19/2001	Lin, et al.			
	A137	6,251,755	06/26/2001	Furukawa et al.			
	A138	6,261,929	07/01/2001	Gehrke et al.			
	A139	6,271,551	08/07/2001	Schmitz et al.			
	A140	6,271,726	08/07/2001	Fransis et al.			
	A141	6,291,321	09/18/2001	Fitzgerald			
	A142	6,313,016	11/06/2001	Kibbel et al.			
	A143	6,316,301	11/13/2001	Kant			
	A144	6,323,108	11/27/2001	Kub et al.			
	A145	6,329,063	12/11/2001	Lo et al.			
	A146	6,335,546	01/01/2002	Tsuda et al.		07/30/1999	
	A147	6,350,993	02/26/2002	Chu et al.			
	A148	6,368,733	04/09/2002	Nishinaga		08/05/1999	
	A149	6,372,356	04/16/2002	Thornton et al.		04/028/2000	
	A150	6,399,970	06/04/2002	Kubo et al.		09/16/1997	
	A151	6,403,975	06/11/2002	Brunner et al.			
	A152	6,406,589	06/18/2002	Yanagisawa			
	A153	6,407,406	06/18/2002	Tezuka		06/29/1999	
	A154	6,425,951	07/30/2002	Chu et al.		08/06/1999	
MLT	A155	6,429,061	08/06/2002	Rim		07/26/2000	
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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
MLT	A156	6,521,041	02/18/2003	Wu et al.			04/09/1999
	A157	6,521,041	02/18/2003	Wu et al.			04/09/1999
	A158	6,555,839	04/29/2003	Fitzgerald			05/16/2001
	A159	6,573,126	06/03/2003	Cheng et al.			08/10/2001
	A160	6,583,015	06/24/2003	Fitzgerald et al.			08/06/2001
	A161	6,593,191	07/15/2003	Fitzgerald			05/16/2001
	A162	6,602,613	08/05/2003	Fitzgerald			
	A163	6,646,322	11/11/2003	Fitzgerald			07/16/2001
	A164	6,649,480	11/18/2003	Fitzgerald et al.			06/19/2001
	A165	6,677,192	01/13/2004	Fitzgerald			07/16/2001
	A166	6,703,144	03/09/2004	Fitzgerald			03/18/2003
	A167	6,703,688	03/09/2004	Fitzgerald			07/16/2001
	A168	6,723,661	04/20/2004	Fitzgerald			07/16/2001
	A169	6,724,008	04/20/2004	Fitzgerald			07/16/2001
	A170	6,730,551	05/04/2004	Lee et al.			08/02/2002
	A171	6,750,130	06/15/2004	Fitzgerald			01/07/2001
	A172	6,830,976	12/14/2004	Fitzgerald			07/16/2001
	A173	6,876,010	04/05/2005	Fitzgerald			06/07/2000
MLT	A174	6,881,632	04/19/2005	Fitzgerald et al.			07/01/2000
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<b>FORM PTO - 1449</b>					<b>ATTY DOCKET NO.:</b> ASC-023C2				
<b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</b>					<b>APPLICANTS:</b> Fitzgerald				
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<b>FOREIGN PATENT DOCUMENTS</b>									
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
MLT	B1	2001-319935	11/16/2001	JP				N	Y
	B2	4-307974	10/30/1992	JP				N	N
	B3	10-270685	10/09/1998	JP				N	Y
	B4	6-252046	11/19/1992	JP				N	Y
	B5	7-240372	09/12/1995	JP				NO	Abstract
	B6	11-233744	08/27/1999	JP				N	N
	B7	2-210816	08/22/1990	JP				N	Abstract
	B8	6-177046	06/24/1994	JP				N	Abstract
	B9	5-166724	07/02/1993	JP				N	Abstract
	B10	61-141116	06/28/1996	JP				N	Abstract
	B11	7-106446	04/21/1995	JP				N	N
	B12	3-36717	02/18/1991	JP				N	Abstract
	B13	2000-031491	01/28/2000	JP				N	N
	B14	2000-021783	08/31/2000	JP				N	Y
	B15	00/48239	08/17/2000	WO				N	Y
	B16	00/54338	09/14/2000	WO				N	Y
	B17	98/59365	12/30/1998	WO				N	Y
	B18	99/53539	10/21/1999	WO				N	Y
	B19	41 01 167	07/23/1992	DE				N	N
	B20	1 020 900	07/19/2000	EP				N	Y
	B21	1 174 928	01/23/2002	EP				N	Y
	B22	0 587 520	03/16/1994	EP				N	Y
	B23	2 342 777	04/19/2000	GB				Y	Y
	B24	0 828 296	03/11/1998	EP				N	Y
	B25	0 683 522	11/22/1995	EP				N	Y
	B26	0 838 858	04/29/1998	EP				N	N
	B27	0 829 908	03/18/1998	EP				N	Y
	B28	63-73398	04/02/1988	JP				N	N
	B29	6-244112	09/02/1994	JP				N	N
MLT	B30	7-094420	04/07/1995	JP				N	Abstract
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		APPLICANTS: Fitzgerald	
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OTHER ART, JOURNAL ARTICLES, ETC.			
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)		
MLT	C1	Armstrong et al., "Design of Si/SiGe Heterojunction Complementary Metal-Oxide-Semiconductor Transistors," IEDM Technical Digest (1995 International Electron Devices Meeting) pp. 761-764.	
	C2	Armstrong, "Technology for SiGe Heterostructure-Based CMOS Devices", PhD Thesis, Massachusetts Institute of Technology, 1999, pp. 1-154.	
	C3	Augusto et al., "Proposal for a New Process Flow for the Fabrication of Silicon-based Complementary MOD-MOSFETs without ion Implantation," Thin Solid Films, vol. 294, no. 1-2, pp. 254-258 (February 15, 1997).	
	C4	Borenstein et al., "A New Ultra-Hard Etch-Stop Layer for High Precision Micromachining," Proceedings of the 1999 12th IEEE International Conference on Micro Electro Mechanical Systems (MEMS) (January 17-21, 1999) pp. 205-210.	
	C5	Bouillon et al., "Search for the optimal channel architecture for 0.18/0.12 $\mu\text{m}$ bulk CMOS Experimental study," IEEE, (1996) pp. 21.2.1-21.2.4.	
	C6	Bruehl et al., "SMART CUT: A Promising New SOI Material Technology," Proceedings 1995 IEEE International SOI Conference (October 1995) pp. 178-179.	
	C7	Bruehl, "Silicon on Insulator Material Technology," Electronic Letters, Vol. 13, No. 14 (July 6, 1995) pp. 1201-1202.	
	C8	Bufler et al., "Hole transport in strained Si <sub>1-x</sub> Ge <sub>x</sub> alloys on Si <sub>1-y</sub> Ge <sub>y</sub> substrates," Journal of Applied Physics, Vol. 84, No. 10 (November 15, 1998) pp. 5597-5602.	
	C9	Bulsara et al., "Relaxed In <sub>x</sub> Ga <sub>1-x</sub> As Graded Buffers Grown with Organometallic Vapor Phase Epitaxy on GaAs," <u>Applied Physics Letters</u> , Vol. 72, Issue 13 (July 30, 1998), pp. 1608-1610.	
	C10	Bulsara, "Materials Issues with the Integration of Lattice-Mismatched In <sub>x</sub> Ga <sub>1-x</sub> As on GaAs," PhD Thesis, MIT, June 1998, pp. 1-178.	
	C11	Burghartz et al., "Microwave Inductors and Capacitors in Standard Multilevel Interconnect Silicon Technology", IEEE Transactions on Microwave Theory and Techniques, Vol. 44, No. 1, January 1996, pp. 100-104.	
	C12	Carlin et al., "High Efficiency GaAs-on-Si Solar Cells with High Voc Using Graded GeSi Buffers," IEEE (2000) pp. 1006-1011	
	C13	Chang et al., "Selective Etching of SiGe/Si Heterostructures," Journal of the Electrochemical Society, No. 1 (January 1991) pp. 202-204.	
	C14	Charasse et al., "MBE Growth of GaAs on Si at Thomson," <u>Institute of Electronic Structure and Laser</u>	
	C15	Crumbaker et al., "The Influence of Dislocation Density on Electron Mobility in InP Films on Si," <u>Applied Physics Letters</u> , Vol. 59, Issue 9 (08/26/91), pp. 1090-1092.	
MLT	C16	Cullis et al., "Growth ripples upon strained SiGe epitaxial layers on Si and misfit dislocation interactions," Journal of Vacuum Science and Technology A, Vol. 12, No. 4 (July/August 1994) pp. 1924-1931.	
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<b>OTHER ART, JOURNAL ARTICLES, ETC.</b>			
<b>EXAM. INIT.</b>	<b>OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>		
MLT	C17	Currie et al. "Controlling Threading Dislocation in Ge on Si Using Graded SiGe Layers and Chemical-Mechanical Polishing" vol. 72 No. 14 (Feb. 1998) pp. 1718-1720.	
	C18	Dilliway et al., "Characterization of Morphology and Defects in Silicon Germanium Virtual Substrates," <u>Journal of Materials Science</u> , Vol. 11, Issue 7 (2000), pp. 549-556.	
	C19	Eaglesham et al., "Dislocation-Free Stranski-Krastanow Growth of Ge on Si(100)," Physical Review Letters, Vol. 64, No. 16 (April 16, 1990) pp. 1943-1946.	
	C20	Erdtmann et al., "Gainas/Inp Quantum Well Infrared Photodetectors on Si Substrate for Low-Cost Focal Plan Arrays," PhD Thesis, Northwestern University, 2000, pp. 1-225.	
	C21	Feijoo et al., "Epitaxial Si-Ge Etch Stop Layers with Ethylene Diamine Pyrocatechol for Bonded and Etchback Silicon-on-Insulator," Journal of Electronic Materials, Vol. 23, No. 6 (June 1994) pp. 493-496.	
	C22	Fischetti et al., "Band structure, deformation potentials, and carrier mobility in strained Si, Ge, and SiGe alloys," J. Appl. Phys., Vol. 80, No. 4 (August 15, 1996) pp. 2234-2252.	
	C23	Fitzgerald et al., "Dislocation dynamics in relaxed graded composition semiconductors," Materials Science and Engineering B67, (1999) pp. 53-61.	
	C24	Fitzgerald et al., "GeSi/Si Nanostructures," Department of Material Science, MIT (1995), pp 1-15.	
	C25	Fitzgerald et al., "Relaxed GexSi1-x structures for III-V integration with Si and high mobility two-dimensional electron gases in Si," AT&T Bell Laboratories, Murray Hill, NJ 07974 (1992) American Vacuum Society, pp. 1807-1819	
	C26	Fitzgerald et al., "Totally Relaxed GexSi1-x Layers with Low Threading Dislocation Densities Grown on Si Substrates," Applied Physics Letters, Vol. 59, No. 7 (August 12, 1991) pp. 811-813.	
	C27	Garone et al., "Silicon vapor phase epitaxial growth catalysis by the presence of germane," Applied Physics Letters, Vol. 56, No. 13 (March 26, 1990) pp. 1275-1277.	
	C28	Giovane et al., "Strain-Balanced Silicon-Germanium Materials for Near IR Photodetection in Silicon-Based Optical Interconnects," PhD Thesis, MIT, 1998, pp. 1-134.	
	C29	Gray and Meyer, "Analysis and Design of Analog Integrated Circuits", John Wiley & Sons, 1984, pp. 605-632.	
	C30	Grillot et al., "Acceptor diffusion and segregation in (AlxGa1-x)0.5In0.5P heterostructures, Vol. 91, No. 8 (April 15, 2002), pps. 4891-4899.	
	C31	Grützmacher et al., "Ge segregation in SiGe/Si heterostructures and its dependence on deposition technique and growth atmosphere," Applied Physics Letters, Vol. 63, No. 18 (November 1, 1993) pp. 2531-2533.	
	C32	Hackbarth et al., "Alternatives to thick MBE-grown relaxed SiGe buffers," Thin Solid Films, Vol. 369, No. 1-2 (July 2000) pp. 148-151.	
MLT	C33	Hackbarth et al., "Strain relieved SiGe buffers for Si-based heterostructure field-effect transistors," Journal of Crystal Growth, Vol. 201/202 (1999) pp. 734-738.	
<b>EXAMINER</b> Minhloan Tran		<b>DATE CONSIDERED</b> 11/05	

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<b>EXAM. INIT.</b>	<b>OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>		
MLT	C34	Herzog et al., "SiGe-based FETs: buffer issues and device results," Thin Solid Films, Vol. 380 (2000) pp. 36-41.	
	C35	Höck et al., "Carrier mobilities in modulation doped Si1-xGex heterostructures with respect to FET applications," Thin Solid Films, Vol. 336 (1998) pp. 141-144.	
	C36	Höck et al., "High hole mobility in Si0.17 Ge0.83 channel metal-oxide-semiconductor field-effect transistors grown by plasma-enhanced chemical vapor deposition," Applied Physics Letters, Volume 76, No. 26 (June 26, 2000) pp. 3920-3922.	
	C37	Höck et al., "High performance 0.25 µm p-type Ge/SiGe MODFETs," Electronics Letters, Vol. 34, No. 19 (September 17, 1998) pp. 1888-1889.	
	C38	Hsu et al., "Surface morphology of related GexSi1-x films," <u>Applied Physics Letters</u> , 61 (11) (September 14, 1992), pp. 1293-1295.	
	C39	Huang et al., "High-quality strain-relaxed SiGe alloy grown on implanted silicon-on-insulator substrate," Applied Physics Letters, Vol. 76, No. 19 (May 8, 2000) pp. 2680-2682.	
	C40	Huang et al., "The Impact of Scaling Down to Deep Submicron on CMOS RF Circuits", IEEE Journal of Solid-State Circuits, Vol. 33, No. 7, July, 1998, pp. 1023-1036.	
	C41	IBM Technical Disclosure Bulletin, Vol. 35, No. 4B (September 1992), "2 Bit/Cell EEPROM Cell Using Band to Band Tunneling for Data Read-Out," pp. 136-140.	
	C42	IBM Technical Disclosure Bulletin, Volume 32, No. 8A, January 1990, "Optimal Growth Technique and Structure for Strain Relaxation of Si-Ge Layers on Si Substrates", pp. 330-331.	
	C43	Ishikawa et al., "Creation of Si-Ge-based SIMOX structures by low energy oxygen implantation," Proceedings 1997 IEEE International SOI Conference (October 1997) pp. 16-17.	
	C44	Ishikawa et al., "SiGe-on-insulator substrate using SiGe alloy grown Si(001)," Applied Physics Letters, Vol. 75, No. 7 (August 16, 1999) pp. 983-985.	
	C45	Ismail et al., "Modulation-doped n-type Si/SiGe with inverted interface," Appl. Phys. Lett., Vol. 65, No. 10 (September 5, 1994) pp. 1248-1250.	
	C46	Ismail, "Si/SiGe High-Speed Field-Effect Transistors," Electron Devices Meeting, Washington, D.C. (December 10, 1995) pp. 20.1.1-20.1.4.	
	C47	Kearney et al., "The effect of alloy scattering on the mobility of holes in a Si1-xGex quantum well," Semicond. Sci Technol., Vol. 13 (1998) pp. 174-180.	
	C48	Kim et al., "A Fully Integrated 1.9-GHz CMOS Low-Noise Amplifier", IEEE Microwave and Guided Wave Letters, Vol. 8, No. 8, August 1998, pp. 293-295.	
	C49	Kissinger et al., "Stepwise Equilibrated Graded GexSi1-x Buffer with Very Low Threading Dislocation Density on Si(001)," <u>Applied Physics Letters</u> , Vol. 66, Issue 16 (April 17, 1995), pp. 2083-2085.	
MLT	C50	Knall et al., "The Use of Graded InGaAs Layers and Patterned Substrates to Remove Threading Dislocations From GaAs on Si," <u>Journal of Applied Physics</u> , Vol. 76, Issue 5 (September 1, 1994), pp. 2697-2702.	
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MLT	C51	Koester et al., "Extremely High Transconductance Ge/Si <sub>0.4</sub> Ge <sub>0.6</sub> p-MODFET's Grown by UHV-CVD," IEEE Electron Device Letters, Vol. 21, No. 3 (March 2000) pp. 110-112.	
	C52	König et al., "Design Rules for n-Type SiGe Hetero FETs," Solid State Electronics, Vol. 41, No. 10 (1997), pp. 1541-1547.	
	C53	König et al., "p-Type Ge-Channel MODFET's with High Transconductance Grown on Si Substrates," IEEE Electron Device Letters, Vol. 14, No. 4 (April 1993) pp. 205-207.	
	C54	König et al., "SiGe HBTs and HFETs," Solid-State Electronics, Vol. 38, No. 9 (1995) pp. 1595-1602.	
	C55	Kuznetsov et al., "Technology for high-performance n-channel SiGe modulation-doped field-effect transistors," J. Vac. Sci. Technol., B 13(6), pp. 2892-2896 (November/December 1995).	
	C56	Langdo, "High Quality Ge on Si by Epitaxial Necking," <u>Applied Physics Letters</u> , Vol. 76, Issue 25 (June 19, 2000), pp. 3700-3702.	
	C57	Larson, "Integrated Circuit Technology Options for RFIC's□Present Status and Future Directions", IEEE Journal of Solid-State Circuits, Vol. 33, No. 3, March 1998, pp. 387-399.	
	C58	Lee and Wong, "CMOS RF Integrated Circuits at 5 GHz and Beyond", Proceedings of the IEEE, Vol. 88, No. 10, October 2000, pp. 1560-1571.	
	C59	LeGoues et al., "Relaxation of SiGe Thin Films Grown on Si/SiO <sub>2</sub> Substrates," <u>Journal of Applied Physics</u> , Vol. 75, Issue 11 (June 1, 1974), pp. 2730-2738.	
	C60	Liu et al., "Growth Study of Surfactant-Mediated Relaxed SiGe Graded Layers for 1.55-μM Photodetector Applications," <u>Thin Solid Films</u> , Vol. 380, Issue 1-2 (2000), pp. 54-56.	
	C61	Lu et al., "High Performance 0.1 μm Gate-Length P-Type SiGe MODFET's and MOS-MODFET's", IEEE Transactions on Electron Devices, Vol. 47, No. 8, August 2000, pp. 1645-1652.	
	C62	Luan et al., "High Quality Ge Epilayers on Si with Low Threading-Dislocations Densities," <u>Applied Physics Letters</u> , Vol. 75, Issue 19 (November 8, 1999), pp. 2909-2911.	
	C63	Luo et al., "High-Quality Strain-Relaxed SiGe Films Grown with Low Temperature Si Buffer," <u>Journal of Applied Physics</u> , Vol. 89, Issue 13 (September 23, 1991), pp. 1611-1613.	
	C64	Maiti et al., "Strained-Si heterostructure field effect transistors," Semicond. Sci. Technol., Vol. 13 (1998) pp. 1225-1246.	
	C65	Maszara, "Silicon-On-Insulator by Wafer Bonding: A Review," Journal of the Electrochemical Society, No. 1 (January 1991) pp. 341-347.	
	C66	Meyerson et al., "Cooperative Growth Phenomena in Silicon/Germanium Low-Temperature Epitaxy," Applied Physics Letters, Vol. 53, No. 25 (December 19, 1988) pp. 2555-2557.	
MLT	C67	Mizuno et al., "Electron and Hole Mobility Enhancement in Strained-Si MOSFET's on SiGe-on-Insulator Substrates Fabricated by SIMOX Technology," IEEE Electron Device Letters, Vol. 21, No. 5 (May 2000) pp. 230-232.	
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MLT	C68	Mizuno et al., "High Performance Strained-Si p-MOSFETs on SiGe-on-Insulator Substrates Fabricated by SIMOX Technology," IEEE IDEM Technical Digest, (1999 International Electron Device Meeting) pp. 934-936.	
	C69	Monroe et al., "Comparison of Mobility-Limiting Mechanisms in High-Mobility Si1-xGex Heterostructures," <u>Journal of Vacuum Science and Technology B</u> , Vol. B11, Issue 4 (Jul/Aug 1993), pp. 1731-1737.	
	C70	Nayak et al., "High-Mobility Strained-Si PMOSFET's"; IEEE Transactions on Electron Devices, Vol. 43, No. 10, October 1996, pp. 1709-1716.	
	C71	O'Neill et al., "SiGe Virtual substrate N-channel heterojunction MOSFETS," Semicond. Sci. Technol., Vol. 14 (1999) pp. 784-789.	
	C72	O'ta, Y. et al., "Application of heterojunction FET to power amplifier for cellular telephone," ELECTRONIC LETTERS, IEE STEVANAGE, GB, Vol. 30 No. 11, 26 May 1994, pp. 906-907.	
	C73	Ohori et al., "Effect of Threading Dislocations on Mobility in Selectively Doped Heterostructures Grown on Si Substrates," <u>Journal of Applied Physics</u> , Vol. 75, Issue 7 (April 1, 1994), pp. 3681-3683.	
	C74	Papananos, "Radio-Frequency Microelectronic Circuits for Telecommunication Applications", Kluwer Academic Publishers, 1999, pp. 115-117, 188-193.	
	C75	Parker et al., "SiGe heterostructure CMOS circuits and applications," Solid State Electronics, Vol. 43 (1999) pp. 1497-1506.	
	C76	Powell et al., "New Approach to the Growth of Low Dislocation Relaxed SiGe Material," <u>Applied Physics Letters</u> , Vol. 64, Issue 14 (April 4, 1994), pp.1856-1858.	
	C77	Ransom et al., "Gate-Self-Aligned n-channel and p-channel Germanium MOSFET's," IEEE Transactions on Electron Devices, Vol. 38, No. 12 (December 1991) pp. 2695.	
	C78	Reinking et al., "Fabrication of high-mobility Ge p-channel MOSFETs on Si substrates," Electronics Letters, Vol. 35, No. 6 (March 18, 1999) pp. 503-504.	
	C79	Rim et al., "Enhanced Hole Mobilities in Surface-channel Strained-Si p-MOSFETs"; IEDM, 1995, pp. 517-520.	
	C80	Rim et al., "Fabrication and Analysis of Deep Submicron Strained-Si N-MOSFET's"; IEEE Transactions on Electron Devices, Vol. 47, No. 7, July 2000, pp. 1406-1415.	
	C81	Rim, "Application of Silicon-Based Heterostructures to Enhanced Mobility Metal-Oxide-Semiconductor Field-Effect Transistors", PhD Thesis, Stanford University, 1999; pp. 1-184.	
	C82	Robbins et al., "A model for heterogeneous growth of Si1-xGex films for hydrides," <u>Journal of Applied Physics</u> , Vol. 69, No. 6 (March 15, 1991) pp. 3729-3732.	
	C83	Sadek et al., "Design of Si/SiGe Heterojunction Complementary Metal-Oxide-Semiconductor Transistors," IEEE Trans. Electron Devices (August 1996) pp. 1224-1232.	
	C84	Sakaguchi et al., "ELTRAN® by Splitting Porous Si Layers," Proc. 195 <sup>th</sup> Int. SOI Symposium, Vol. 99-3, <u>Electrochemical Society</u> (1999) pp. 117-121.	
	C85	Samavedam et al., "Novel Dislocation Structure and Surface Morphology Effects in Relaxed Ge/Si-Ge (graded)/Si Structures," <u>Journal of Applied Physics</u> , Vol. 87, Issue 7 (April 1, 1997), pp. 3108-3116.	
	C86	Schäffler, "High-Mobility Si and Ge Structures," Semiconductor Science and Technology, Vol. 12 (1997) pp. 1515-1549.	
MLT	C87	Sugimoto and Ueno, "A 2V, 500 MHz and 3V, 920 MHz Low-Power Current-Mode 0.6 $\mu$ m CMOS VCO Circuit", IEICE Trans. Electron., Vol.E82-C, No. 7, July 1999, pp. 1327-1329.	
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MLT	C88	Ternent et al., "Metal Gate Strained Silicon MOSFETs for Microwave Integrated Circuits", IEEE October 2000, pp. 38-43.	
	C89	Ting et al., "Monolithic Integration of III-V Materials and Devices on Silicon," <u>SPIE Conference 1999- Silicon Based Optoelectronics</u> , Vol. 3630 (Jan 1999), pp.19-28.	
	C90	Tsang et al., "Measurements of alloy composition and strain in thin $\text{Ge}_x\text{Si}_{1-x}$ layers," <u>J. Appl. Phys.</u> , Vol. 75 No. 12 (June 15, 1994) pp. 8098-8108.	
	C91	Tweet et al., "Factors determining the composition of strained GeSi layers grown with disilane and germane," <u>Applied Physics Letters</u> , Vol. 65, No. 20 (November 14, 1994) pp. 2579-2581.	
	C92	Usami et al., "Spectroscopic study of Si-based quantum wells with neighboring confinement structure," <u>Semicon. Sci. Technol.</u> (1997) (abstract).	
	C93	Valtueña et al., "Influence of the Surface Morphology on the Relaxation of Low-Strained $\text{In}_x\text{Ga}_{1-x}$ As Linear Buffer Structures," <u>Journal of Crystal Growth</u> , Vol. 182 (1997), pp. 281-291.	
	C94	Watson et al., "Relaxed, Low Threading Defect Density $\text{Si}_{0.7}\text{Ge}_{0.3}$ Epitaxial Layers Grown on Si by Rapid Thermal Chemical Vapor Deposition," <u>Journal of Applied Physics</u> , Vol. 75, Issue 1 (January 1, 1994), pp. 263-269.	
	C95	Welser et al., "Electron Mobility Enhancement in Strained-Si N-Type Metal-Oxide-Semiconductor Field-Effect Transistors," <u>IEEE Electron Device Letters</u> , Vol. 15, No. 3 (March 1994) pp. 100-102.	
	C96	Welser et al., "Evidence of Real-Space Hot-Electron Transfer in High Mobility, Strained-Si Multilayer MOSFETs," <u>IEEE IDEM Technical Digest (1993 International Electron Devices Meeting)</u> pp. 545-548.	
	C97	Welser et al., "NMOS and PMOS Transistors Fabricated in Strained Silicon/Relaxed Silicon-Germanium Structures," <u>IEEE IDEM Technical Digest (1992 International Electron Devices Meeting)</u> pp. 1000-1002.	
	C98	Welser, "The Application of Strained Silicon/Relaxed Silicon Germanium Heterostructures to Metal-Oxide-Semiconductor Field-Effect Transistors," PhD Thesis, Stanford University, 1994, pp. 1-205.	
	C99	Wolf and Tauber, <u>Silicon Processing for the VLSI Era</u> , Vol. 1: Process Technology, Lattice Press, Sunset Beach, CA, pp. 384-386 (1986).	
	C100	Xie et al., "Fabrication of High Mobility Two-Dimensional Electron and Hole Gases in $\text{GeSi}/\text{Si}$ ," <u>Journal of Applied Physics</u> , Vol. 73, Issue 12 (June 15, 1993), pp. 8364-8370.	
	C101	Xie et al., "Semiconductor Surface Roughness: Dependence on Sign and Magnitude of Bulk Strain," <u>The Physical Review Letters</u> , Vol. 73, No. 22 (November 28, 1994) pp. 3006-3009.	
	C102	Xie et al., "Very high mobility two-dimensional hole gas in $\text{Si}/\text{Ge}_x\text{Si}_{1-x}/\text{Ge}$ structures grown by molecular beam epitaxy," <u>Appl. Phys. Lett.</u> , Vol. 63, No. 16 (October 18, 1993) pp. 2263-2264.	
	C103	Xie, "SiGe Field effect transistors," <u>Materials Science and Engineering</u> , Vol. 25 (1999) pp. 89-121.	
	C104	Yeo et al., "Nanoscale Ultra-Thin-Body Silicon-on-Insulator P-MOSFET with a SiGe/Si Heterostructure Channel," <u>IEEE Electron Device Letters</u> , Vol. 21, No. 4 (April 2000) pp. 161-163.	
MLT	C105	Zhang et al., "Demonstration of a GaAs-Based Compliant Substrate Using Wafer Bonding and Substrate Removal Techniques," <u>Electronic Materials and Processing Research Laboratory, Department of Electrical Engineering, University Park, PA 16802 (1998)</u> pp. 25-28.	
<b>EXAMINER</b> Minhloan Tran		<b>DATE CONSIDERED</b> 11/05	